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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,211	02/17/2004	ING-JER CHIOU	12339-US-PA	2210

31561 7590 12/21/2004

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE  
7 FLOOR-1, NO. 100  
ROOSEVELT ROAD, SECTION 2  
TAIPEI, 100  
TAIWAN

EXAMINER

VERDIER, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/708,211

Applicant(s)

CHIOU ET AL.

Examiner

Christopher Verdier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2-17-04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_

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*Specification*

The abstract of the disclosure is objected to because in line 1, "[FAN MODULE]" should be changed to -- FAN MODULE --, and because in the last line, -- a -- should be inserted after "has".

Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: Appropriate correction is required.

The specification is missing page numbers.

On page 1, line 1, "Description" is superfluous and should be deleted.

On page 1, line 2, "[FAN MODULE]" should be changed to -- FAN MODULE --.

In paragraph 4, line 13, "convention" should be changed to -- convection --.

In paragraph 5, line 8, "enter" should be changed to -- enters --.

In paragraph 5, line 9, "exhaust" should be changed to -- exhausts --.

In paragraph 6, line 12, "mal-function" should be changed to -- malfunction --.

In paragraph 21, line 16, "in integral" should be changed to -- integrally --.

In paragraph 22, line 11, "directionof" should be changed to -- direction of --.

In paragraph 23, line 4, "is" should be changed to -- are --.

In paragraph 24, line 17, -- in -- should be inserted after "embodiment".

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### *Claim Objections*

Claims 2 and 7 are objected to because of the following informalities: Appropriate correction is required.

In claim 2, line 1, "has" should be changed to -- have --.

In claim 7, line 4, "in integral" should be changed to -- integrally --.

In claim 7, line 5, -- are -- should be inserted after "fins".

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin 6,751,097 (figures 2-6). Note the fan module comprising a housing 30 having a mounting space near 32, an air inlet 32 and a corresponding air outlet 33, wherein the mounting space links the air inlet to the air outlet, an unnumbered fan installed inside the mounting space, and a plurality of fins 20 aligned in parallel and fitted inside the air outlet to divide the air outlet into a plurality of slots, with each of the slots having a width smaller than 1 mm (column 2, lines 47-49 and column 3, lines 11-13). The longitudinal direction of the air outlet is parallel to the direction of alignment

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of the fins, and the longitudinal direction of the air outlet is perpendicular to the longitudinal direction of the fins.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyahara 6,439,299 in view of Lin 6,751,097. Miyahara (figures 1-3) discloses a fan module substantially as claimed, including a housing 1/16 having an unnumbered mounting space near 4a, an air inlet 16a and a corresponding air outlet 18, wherein the mounting space links the air inlet to the air outlet, a fan 4 installed inside the mounting space, and a plurality of fins 10-14

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aligned in parallel and fitted inside the air outlet to divide the air outlet into a plurality of slots. The longitudinal direction of the air outlet is perpendicular to the direction of alignment of the fins, and the longitudinal direction of the air outlet is parallel to the longitudinal direction of the fins. However, Miyahara does not disclose that each of the slots has a width smaller than 1 mm.

Lin (figures 2-6) shows a fan module comprising a housing 30 having an air outlet 33, with a plurality of fins 20 aligned in parallel and fitted inside the air outlet to divide the air outlet into a plurality of slots, with each of the slots having a width smaller than 1 mm (column 2, lines 47-49 and column 3, lines 11-13), for the purpose of preventing alien particles from dropping into the housing.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form the fan module of Miyahara such that each of the slots has a width smaller than 1 mm, as taught by Lin, for the purpose of preventing alien particles from dropping into the housing. Although the slots of Lin are vertically oriented and the slots of Miyahara are horizontally oriented, one of ordinary skill in the art would have recognized the teachings of Lin that the slot width should be smaller than 1 mm are applicable to horizontally oriented slots, because both vertical and horizontal slots would experience the same problem to be solved, i.e. preventing alien particles from dropping into the fan housing.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin 6,751,097 in view of either (Ishida 6,408,934 or Ko 5,727,624). Lin (figures 2-6) discloses a fan module

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substantially as claimed as set forth above, including an unnumbered top cover plate and an unnumbered bottom base plate, with the air inlet 32 being formed on the cover plate, with the air outlet 33 being formed by joining the cover plate and the base plate integrally, but does not disclose that the fins 20 are attached to the cover plate. Rather, the fins are attached to the side of the outlet via unnumbered holes.

Ishida (figures 1 and 14A-14B) shows a fan module having a cover plate 130, and a base plate 11, with fins 132 attached to the cover plate, for the purpose of providing support for the fins. Ko (figure 6) shows a fan module having a cover plate 3, and a base plate 1, with fins 12/121 attached to the cover plate via screws, for the purpose of forming a sturdy module by attaching the cover plate to the base plate and fins.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form the fan module of Lin such that the fins are attached to the cover plate, as taught by either Ishida or Ko.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

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provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2 and 5-6 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 10, 11, and 12, respectively, of copending Application No. 10/710,040 in view of Bookhardt 6,328,097. Claims 1, 10, 11, and 12 of the copending application claim substantially the same subject matter as claims 1-2 and 5-6 of the instant application, including a fan module, comprising a casing, having a mounting space, an air inlet and an air outlet, wherein the air inlet and the air outlet are linked through the mounting space, a fan, disposed within the mounting space, and a plurality of fins, disposed across the air outlet and laid parallel to each other, wherein each fin partitions the air outlet into a plurality of narrow slots having a width smaller than or equal to 1 mm, with each slot having a width of between 0.8 to 1 mm, with the longitudinal direction the air outlet being perpendicular to the direction of alignment of the fins, and the longitudinal direction of the air outlet being parallel to the longitudinal direction of the fins, However, claims 1, 10, 11, and 12 of the copending application do not claim that the fins are fitted inside the air outlet.

Bookhardt (figure 1) shows a fan having plural fins 140 fitted inside an air outlet near 135 of a fan module 110, for the purpose of forming a compact fan module without any of the fins protruding beyond the outlet.



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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form the fan module of claims 1 and 10-12 of copending application 10/710,040 such that the fins are fitted inside the air outlet, as taught by Bookhardt, for the purpose of forming a compact fan module without any of the fins protruding beyond the outlet.

Claim 7 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 13 of copending Application No. 10/710,040 and Bookhardt 6,328,097 as applied to claim 1 above, and further in view of either (Ishida 6,408,934 or Ko 5,727,624). Claim 13 of copending application 10,710,040 claims substantially the same subject matter as claim 7 of the instant application, including the housing having a cover plate and a base, with the air inlet being formed on the cover plate, with the air outlet being formed by combining the cover plate and the base, with the fins joined to the cover plate. However, claim 13 of the copending application does not claim that the base is a base plate, with the cover plate and base plate being joined integrally.

Ishida (figures 1 and 14A-14B) shows a fan module having a cover plate 130, and a base plate 11, with the cover plate and base plate being joined integrally, for the purpose of providing a sturdy module by attaching the cover plate to the base plate. Ko (figure 6) shows a fan module having a cover plate 3, and a base plate 1, with the cover plate and base plate being joined integrally via screws, for the purpose of forming a sturdy module by attaching the cover plate to the base plate.

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It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to form the modified fan module of claim 13 of copending application 10/710,040 such that the base is a base plate, with the cover plate and base plate being joined integrally, as taught by either Ishida or Ko.

These are provisional obviousness-type double patenting rejections.

***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee, Huang, Lin '501, Tanaka, and Inoue are cited to show various fans with fin units.

Horng is cited to show a fan module with a cover plate and a base plate.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.V.  
December 17, 2004

  
Christopher Verdier  
Primary Examiner  
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